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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/964,179	09/26/2001	Ken Ioka	OOCL-71 (US-P1506)	9597

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EXAMINER

CRUZ, MAGDA

ART UNIT

PAPER NUMBER

2851

DATE MAILED: 08/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/964,179

Applicant(s)

IOKA, KEN

Examiner

Magda Cruz

Art Unit

2851

-- **Th MAILING DATE** of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 10 and 14 is/are rejected.
- 7) ☒ Claim(s) 7-9 and 11-13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5, 10 and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Higurashi, et al.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Higurashi, et al. (US Patent Number 6,222,593 B1) discloses an image projection and display device (column 2, lines 225-26) comprising a plurality of projectors (7a-7d), a projection screen (8) forming a focusing plane for projected images from the plurality of projectors (7a-7d), mutually overlapping regions existing between said images (Figure 1); a test image storing section (71) for storing prescribed test images (column 12, lines 18-22); an image capturing section (77a, 77b...) for acquiring projected test images (78) in which a prescribed test image (76) is projected onto said projection

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screen respectively by each of said projectors (79a, 79b...); a correction data calculating section (74) for calculating correction data for correcting the input images for the respective projectors, on the basis of the acquired test images (column 12, lines 23-31), in such a manner that a target brightness is achieved across the whole projection area including the overlapping regions (column 18, lines 13-18); a correction data storing section (92) for storing the correction data thus calculated (column 12, lines 42-46); an image correcting section for correcting the images input to the respective projectors, by using said correcting data (column 17, lines 31-35), wherein the uniform brightness is achieved across the whole projection area including the overlapping regions (column 18, lines 60-63). The correction data storing section stores initial correction data as first correction data (column 18, lines 8-10), said correction data calculating section calculates second correction data (column 18, lines 10-12), from the image of the prescribed test image projected after correction (column 18, lines 45-47) using the first correction data (column 18, lines 48-50); judges whether or not it is necessary to update the first correction data, according to the second correction data, and judges of an updating is necessary (column 9, line 66 through column 10, line 3). The correction data calculating section repeats the task of updating the first correction data (column 5, lines 47-50), until it is judged from the second correction data that it is not necessary to create new first correction data (column 7, lines 10-22).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being obvious over Higurashi, et al. in view of Ioka.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned

by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(I)(1) and § 706.02(I)(2).

Higurashi, et al. (US Patent Number 6,222,593 B1) teaches the salient features of the present invention, except a light shielding sections disposed in the light paths of the plurality of projectors, so as to reduce the quantity of light in the overlapping regions on the projection screen. However, Higurashi, et al. discloses optical sensors that detect the state of the projection image (column 10, lines 57-58).

Ioka (US Patent Number 6,558,006 B2) discloses a light shielding sections (31, 32) disposed in the light paths of the plurality of projectors (3a, 3b), so as to reduce the quantity of light (column 9, lines 2-8) in the overlapping regions (OL) on the projection screen (4).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize the light shielding sections disclosed by Ioka in substitution of the optical sensors from Higurashi, et al.'s invention, for the purpose of diminishing the light amount in the overlapping portion (column 9, lines 5-6).

Allowable Subject Matter

5. Claims 7-9 and 11-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter:

The prior art does not teach an image projection and display device, comprising in combination with the additionally recited elements, wherein at least one of the prescribed test images stored in the test image storing section is a white, or gray, or one of red, green and blue color test screen.

Response to Arguments

7. Applicant's arguments filed 05/29/2003 have been fully considered but they are not persuasive.

8. Regarding claims 1-5, the applicant has argued that the prior art does not teach the "correction data for correcting input images for respective projectors, on the basis of the acquired test images, such that a target brightness is achieved across the whole projection are including overlapping regions" and "the parameter calculating means accurately calculates the second parameter", wherein the second parameter is "for indicating a positional relationship between images projected on the screen by a plurality of projectors". However, Higurashi, et al. (US Patent Number 6,222,593 B1) teaches such "correction data for correcting input images for respective projectors, on the basis of the acquired test images (column 12, lines 23-31), such that a target brightness is achieved across the whole projection are including overlapping regions" (column 13, lines 46-49) and "the parameter calculating means accurately calculates the second parameter" (column 17, lines 51-54), wherein the second parameter is "for indicating a positional relationship between images projected on the screen by a plurality of projectors" (column 17, lines 43-43-49).

9. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the parameter calculating means accurately calculates the second parameter) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Surati et al. (US Patent Number 6,456,339 B1) discloses a super-resolution display wherein the projected images from plural projectors completely overlap.

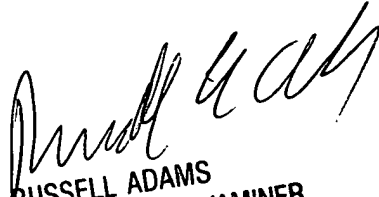
11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Magda Cruz whose telephone number is (703)308-6367. The examiner can normally be reached on Monday through Thursday 8:00-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russ Adams can be reached on (703)308-2847. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9318 for regular communications and (703)872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-1782.


RUSSELL ADAMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

Magda Cruz
Patent Examiner
August 3, 2003